

CLAIMS

What is claimed is:

5 1. A method for automatically correcting for depth errors in measurements taken from a drillstring comprising the steps of:

receiving data representing measurements taken in a hydrocarbon wellbore at a plurality of depths within the wellbore from at least one sensor located 10 on a drillstring used to drill the wellbore;

automatically calculating corrections for errors in the depth of the locations; and

making use of the measured data having the 15 depths corrected.

2. A method according to claim 1 wherein the step of automatically calculating the corrections is based at least in part on the state of a drilling rig used to 20 support the drillstring at the times when the measurements are taken.

3. A method according to claim 1 wherein further comprising the step of measuring the length of portions 25 of the drillstring prior to insertion into the wellbore.

4. A method according to claim 3 wherein a time versus depth log is constructed using at least the measured length of portions of the drillstring.

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5. A method according to claim 4 wherein the calculated corrections is applied to time versus depth

log to generate a corrected time versus depth log, and
wherein the corrected time versus depth log is combined
with the data representing measurements taken in the
wellbore such that a corrected depth can be attributed to
5 said measurements.

6. A method according to claim 1 wherein said step
of calculating corrections is based in part on estimates
of stretch of the length of the drillstring.

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7. A method according to claim 1 wherein said step
of calculating corrections includes the step of computing
the hookload.

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8. A method according to claim 7 wherein said step
of calculating corrections includes the step of computing
a calculated hookload and varying the friction factor or
the weight on bit until the hookload and the calculated
hookload match.

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